

AMENDMENTS TO THE CLAIMS

Please cancel claims 3 and 4 without prejudice or disclaimer and amend claims 21-24 as follows:

1. – 4. (Canceled).

5. (Previously Presented) A method of controlling an air compressor, said air compressor including a tank portion for reserving compressed air used in a pneumatic tool, a compressed air generation portion for generating compressed air and supplying said compressed air to said tank portion, a drive portion including a motor for driving said compressed air generation portion, and a control circuit portion for controlling said drive portion, the method comprising:

detecting pressure P of said compressed air reserved in said tank portion;

storing a plurality of values indicating different rotational speeds of the motor;

calculating a rate $\Delta P/\Delta T$ between pressure change ΔP and time ΔT ;

selecting one of the values based on the pressure P of said tank portion and the rate $\Delta P/\Delta T$ of pressure change; and

controlling the rotational speed of said motor in accordance with the selected value.

6. – 20. (Canceled).

21. (Currently Amended) The ~~air-compressor method~~ according to claim [[3]] 5, wherein the plurality of values comprise integral times of a predetermined rotational speed.

22. (Currently Amended) The ~~air-compressor~~ method according to claim ~~[[3]]~~ 5, wherein said controlling comprises: control-circuit portion further comprises fourth means for

judging whether the ~~internal~~ pressure P in the tank is higher than a predetermined value;[[,]] and [[for]]

controlling the motor to stop when the ~~internal~~ pressure P is higher than the predetermined value.

23. (Currently Amended) The ~~air-compressor~~ method according to claim ~~[[3]]~~ 5, wherein said ~~control-circuit portion calculates~~ calculating includes calculating a first rate $\Delta P1/\Delta T1$ of pressure change $\Delta P1$ to a relatively short time $\Delta T1$ and a second rate $\Delta P2/\Delta T2$ of pressure change $\Delta P2$ to a time $\Delta T2$ longer than the time $\Delta T1$, and ~~selects~~

wherein said selecting includes selecting one of the rotational speeds based on the first and second rates of pressure change.

24. (Currently Amended) The ~~air-compressor~~ method according to claim ~~[[4]]~~ 5, ~~wherein the memory stores further comprising:~~

storing a plurality of patterns indicating relations among the ~~internal~~ pressure P of said tank portion, the rate $\Delta P/\Delta T$ of pressure change, and the rotational speeds of said motor;[[,]] and ~~wherein the~~

selecting one of the patterns ~~is selected~~ based on a currently operating motor speed.

25. (Previously Presented) A method of controlling an air compressor, said air compressor including a tank portion for reserving compressed air used in a pneumatic tool, a compressed air generation portion for generating compressed air and supplying said compressed

air to said tank portion, a drive portion including a motor for driving said compressed air generation portion, and a control circuit portion for controlling said drive portion, the method comprising:

- detecting pressure P of said compressed air reserved in said tank portion;
- calculating a rate $\Delta P/\Delta T$ between pressure change ΔP and time ΔT ;
- storing a plurality of tables each indicating relations among the pressure P , the rate $\Delta P/\Delta T$ and different rotational speeds of the motor;
- selecting one of the plurality of tables based on a currently operating motor speed; and
- searching for the rotational speed of the motor by referring to the selected table.